Technical Bulletin

Bullet No 10 2015-01  Issued: 052015  Revised:  
Equipment 1 Gallon Bail-O-Matic  
Topic One Gallon Loop Gauge & Loop Die Blocking Bar  

**Issues:** Special Tools for: 1. Inspection of properly formed bail loops. 2. Aid in correction of wire length centering.

**Part # 101111-01 ONE GALLON LOOP GAUGE**  
Used to inspect that a flat bail loop has been formed to the proper length.

**Part # 101289 LOOP DIE BLOCKING BAR**  
Used to form flat bail loops.

**Note:** A bail formed without a can present will have a twist-out in both loops toward the exit side of the machine, and will not fit well in the loop gauge.

The Loop Die Blocking Bar causes the loop to be formed flat, with no twist-out, so it can fit well in the loop gauge.
Procedure for Use:

1. Turn the Bail-O-Matic off, with the machine at the end of its bailing cycle.

2. **Follow Lockout / Tagout Procedures** to isolate the air & electric energy sources.

3. Collapse the Loop Die Blocking Bar so the tips will fit between the die adjuster screw holes of the curling dies.

4. Insert the Loop Die Block Bar ends into the curling die adjuster screw holes, and expand the bar until snug against the dies as shown below.

5. Remove the lockout / tagout, and re-energize the machine.
6. With wire in the machine, form a RH loop “real bail”, and safely remove it from the machine.

   **To form a RH loop “real bail”,** jog the machine, with a wire in the wire groove, to the cut-off position, before the wire is pinched against the wire clamp block. Lockout / tagout the machine. Move the wire over to the right against the cut-off bushing. Remove the lockout / tagout from the machine. To form the real bail the rest of the way, finish the bailing cycle at regular speed using the jog function.

7. Check the RH bail loop using the loop gauge, to see if it is the proper length.

8. **To make a LH loop “real bail”,** follow the steps in item # 6, but push the wire to the left, over against the inside-back of the stop block before forming the bail.

9. Check the LH bail loop using the loop gauge, to see if it is the proper length.

**In order for a bail loop to be considered properly formed or acceptable, and reliably stay in the ear of a can, it must measure between the minimum and maximum range shown below.**

![Minimum, Acceptable, Maximum Loop Gauges](image-url)
Solution: Correction of wire length centering.

If the RH real bail loop is long, the knife and cut-off bushing are positioned too far outboard to the right.

Move their position inboard the amount of the extra wire, maintaining the proper knife gap, then make another real bail and check again for proper length.

If the RH real bail length is too short, the knife and cut-off bushing are positioned to far inboard to the left.

Move their position outboard the amount the wire is short, then make another real bail and check again for proper length.

If the LH real bail loop is long, the stop block is positioned too far outboard to the left.

Move the position inboard the amount of the extra wire, maintaining the very, very slight angle outboard at the bottom of the stop block, then make another real bail and check again for proper length.

If the LH real bail length is too short, the stop block is positioned to far inboard to the right.

Move its position outboard the amount the wire is short, then make another real bail and check again for proper length.

We recommend that all customers operating One Gallon Bail-O-Matic machines, use this method to verify if the wire length setup is centered properly, and properly formed loops are obtained within acceptable limits.

Notes:

1. If the flat loop diameter is too large to fit well in loop gauge, verify the .003” gap between the dies and the coverarms, and the .003 gap between the coverarms and the bronze bearing blocks. Re-shim, or replace the bearing blocks accordingly.

2. If the gaps are correct, but the loop diameter is still too large, inspect the curling dies for excess wear, and replace as needed.

3. The intended wire length is 1/32” shorter than the space between the stop block, and the cut-off bushing.

4. If the wire length was ok, and became short without mechanical adjustment, clean the straightening and feed rollers, and verify the Wire Drive/Straightness/Length Setup using the procedure in your manual.